

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,620	07/25/2003	Paul J. Rudeck	M4065.0567/P567-A	9373
24998 DICKSTEIN S	7590 01/29/2007 SHAPIRO LLP	EXAMINER		
DICKSTEIN SHAPIRO LLP 1825 EYE STREET NW			SCHILLINGER, LAURA M	
Washington, DC 20006-5403			ART UNIT	PAPER NUMBER
		•	2813	
SHORTENED STATUTO	RY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		01/29/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

· ·	Application No.	Applicant(s)			
	10/626,620	RUDECK, PAUL J.			
Office Action Summary	Examiner	Art Unit			
	Laura M. Schillinger	2813			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the o	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period was - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 06 De	ecember 2006.				
2a) ☐ This action is FINAL . 2b) ☒ This	_				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.			
Disposition of Claims					
 4) Claim(s) 9-13 and 62-65 is/are pending in the adaptive day of the above claim(s) 62-65 is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 9-13 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or 	n from consideration.				
Application Papers					
9)☐ The specification is objected to by the Examine	•				
10) The drawing(s) filed on is/are: a) acce		Examiner.			
Applicant may not request that any objection to the					
Replacement drawing sheet(s) including the correcti	on is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).			
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. S have been received in Applicati ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachment(s)		•			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate			

Application/Control Number: 10/626,620

Art Unit: 2813

 \bullet^1 3

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 9-13 are rejected under 35 U.S.C. 102(a) as being anticipated by Admitted Prior Art (hereinafter referred to as "APA"- the citations below pertain to Applicant's specification).

APA teaches the following claimed limitations as follows:

9. A memory device comprising:

a gate stack (APA- Fig.2A and page 3 [0007];

a nitride layer adjacent each of said vertical oxide spacer and each said gate stack neither of the nitride layers extending to overlay the contact opening between the gate stack pair (APA- Fig. 2C (12) and page 3 [0007]) wherein the vertical oxide spacer is recessed from a top surface of each gate stack (Fig.3 (11) – inside contact hole the oxide is etched and therefore is "recessed").

- 10. The memory device of claim 9, wherein said gate stack comprises a floating gate and a control gate (APA- Fig.1 (4 and 6) and page 2 [0006]).
- 11. The memory device of claim 9, wherein said vertical oxide spacer is between about 50 A and about 300A in thickness (APA- page 3 [0007]).

Art Unit: 2813

12. The memory device of claim 11, wherein said vertical oxide spacer is about 100A and about 200A in thickness (APA- page 3 [0007]).

13. The memory device of claim 9, wherein said nitride layer has a thickness equal to about one half the width of said vertical oxide spacer (APA – compare Fig.2C (11 and 12).

Response to Arguments

Applicant's arguments filed 12/6/06 have been fully considered but they are not persuasive. Applicant argues that APA fails to teach a recessed oxide spacer- however as cited above and shown in Fig.3- APA does teach a recessed oxide spacer.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M. Schillinger whose telephone number is (571) 272-1697. The examiner can normally be reached on M-T, R-F 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W. Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

1/20/07

Laura M Schillinger Primary Examiner Art Unit 2813